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September 12, 2007

# **MEMORANDUM**

**TO:** Legislative Education Study Committee

**FR:** Frances R. Maestas

RE: STAFF REPORT: STUDENT TEACHER ACCOUNTABILITY REPORTING

SYSTEM (STARS): DEMONSTRATION OF STARS

"Without data, you're just another person with an opinion." This aphorism underscores the importance of making educational decisions at every level based on valid and reliable data.

■ Data Quality Campaign¹

#### Introduction

In education, data-driven decision making is taking its rightful place among the important tools policymakers, teachers, and administrators are using to improve student achievement. Due in part to the information gathering and reporting requirements of the federal *No Child Left Behind Act of 2001* (NCLB), vital policy conversations, such as increasing the rigor and relevance of high school, improving teacher quality, promoting higher graduation rates, and reducing achievement gaps among student populations, are adding to the awareness that such efforts will not be successful without accurate, reliable data. Along with this awareness, however, both policymakers and other decision makers have come to realize that the data required to improve instruction must be more than a periodic snapshot of student performance. Instead, what are needed are data systems that collect high-quality data about how specific school, programs, and individual students are doing over time.

Acknowledging the relationship of data to sound education decision making, states are at various stages of building and using data warehouses to collect, store, and analyze longitudinal student data that make it possible to:

<sup>&</sup>lt;sup>1</sup> The Data Quality Campaign is a national, collaborative effort to encourage and support state policymakers to: (1) improve the collection, availability, and use of high-quality education data; and (2) implement state longitudinal data systems to improve student achievement. The campaign is managed by the National Center for Education Accountability, an initiative of the Education Commission of the States.

- follow students' academic progress as they move from grade to grade;
- determine the value-added and effectiveness of specific schools and programs;
- identify consistently high-performing schools so that educators and the public can learn from best practices;
- evaluate the effect of teacher preparation and training programs on student achievement;
- focus school systems on preparing a higher percentage of students to succeed in rigorous high school courses, college, and challenging jobs; and
- more importantly, provide access to timely, valid, and relevant data that gives teachers the
  information they need to tailor instruction to help each student improve, gives administrators
  the resources and information to effectively and efficiently manage, and enables
  policymakers to evaluate which policy initiatives show the best evidence of increasing
  student achievement and outcomes.

# **New Mexico's Student Teacher Accountability Reporting System (STARS)**

In 2005, legislation was enacted to establish a comprehensive data warehouse at the Public Education Department (PED) to begin to collect and to store student, teacher, course, testing, and financial data into one comprehensive system. Together with the requirement for the conversion to a uniform public school chart of accounts (financial data), the data warehouse should provide the state with accurate, consistent, and reliable data to assist in the decision-making process.

The implementation of a comprehensive data warehouse at PED has been supported by the Legislature with appropriations of approximately \$11.1 million to PED, including four term full-time-equivalent positions.

According to the Data Quality Campaign (DQC), an initiative of the Education Commission of the States (ECS), it is difficult to provide a single price tag for developing a state data warehouse because of the differences in each state's demographic characteristics. Furthermore, it is difficult for states or districts to estimate the costs of a data warehouse system because so much of the process is absorbed into the current infrastructure. Cost differences also may differ because some states implement complete new systems while other states enhance or upgrade existing systems. In an effort to better understand the scope and design of diverse systems, including the costs to create them, in 2006, DQC conducted a case study of four leading states. Table 1 below compares the differences in demographics among the case study states including New Mexico's demographics:

Table 1

					New
	Florida	Utah	Virginia	Wisconsin	Mexico
Number of districts and	67 districts	40 districts	132	425	89 districts
charter schools	5 charters	52 charters	districts	districts	61 charters
			0 charters	15 charters	
Number of students	206 million	510,000	1.2 million	875,000	330,000
Inception of longitudinal data system	1986-87	2005-06	2005-06	2005-06	2006-07

Comparing costs to New Mexico's legislative appropriations, it appears that the New Mexico Legislature is providing strong support to PED for its data warehouse as demonstrated in the following descriptions. Again, it must be emphasized that it is difficult to compare costs among states because of the differences in system implementation.

**Florida:** According to the case study, most development costs for Florida's system were borne in prior years. However, a *quid pro quo* (which is defined as an exchange of one thing for another, by mutual agreement) was negotiated with a vendor to develop the data warehouse. Currently, six full-time staff in the state education agency provide programming support to local school districts.

**Utah:** For 2005 and 2006, it is estimated that state-level information technology (IT) costs totaled \$800,000 per year (to create the student identifier, data warehouse, clearinghouse, NCLB reporting, and test scanning and scoring). Each year, approximately 10 full-time state education agency staff supported the state-level data system.

**Virginia:** In 2000, \$3.6 million was appropriated to provide funds to districts to build a technology infrastructure, including internet-ready local area networks and high-speed, high-bandwidth capability in all schools. The statewide information system and data warehouse cost approximately \$3.0 million to maintain, plus staff time.

**Wisconsin:** Approximately \$650,000 was contracted to a vendor to develop the student identifier system, and another \$650,000 was used for student-level enrollment data collection. This two-year effort was supplemented by about \$1.3 million in state education agency IT staff time.

**New Mexico:** Since 2005, the New Mexico Legislature has appropriated approximately \$11.0 million for implementation of a comprehensive data warehouse at PED, including four full-time term positions.

The DQC study emphasizes that the costs do not take into account the real and potential savings that occur as a result of better data quality and the reduction of outdated and duplicate data collections. District and state representatives in every state indicated that although changing systems was difficult, the benefits outweighed the costs when considering the improved data quality and information available for research and decision making.

Another point of emphasis is that although building and implementing a longitudinal data system is costly and time consuming, it is not a one-time cost. The systems not only will need to be maintained in terms of hardware, software, and annual training, but they also will need to be adapted over time to add and delete data elements as state and federal reporting requirements and accountability systems change. For these reasons, instituting a detailed process for the annual review of data elements, data collection procedures, training methods and infrastructure upgrades should be a part of the state's long-term vision of the data system.

### 2006 Interim STARS Update to the LESC

During the November 2006 interim meeting of the Legislative Education Study Committee (LESC), PED staff outlined the progress of the department in implementing the data warehouse, or STARS at the department. PED reported that, with the completion of phase one (design and development) of STARS, the PED project team identified 11 school districts to participate in a 2006 pilot project to train school district personnel on the data submission and the support capabilities of the system. The objectives of the pilot, they stated, were to validate the data collection and submission process prior to requiring all New Mexico school districts to submit data to STARS for school year 2006-2007. All districts and charter schools, they emphasized,

were in the process of submitting their 40<sup>th</sup> day data for school year 2006-2007. PED staff indicated that phase two (enhanced district reporting and support) of the STARS project was to be completed by January 2007.

**Issue:** LESC staff must make cost estimates for public school support recommendations for upcoming legislative sessions and need data from PED to develop those recommendations. During the 2007 legislative session, LESC staff reported that data for school year 2006-2007 was not provided by PED. According to PED, unreliable data was submitted to STARS by school districts and charter schools precluding the department from providing final approval of data for the 40<sup>th</sup>, 80<sup>th</sup>, and 120<sup>th</sup> school days required reporting. As a result, LESC staff were required to adjust 120<sup>th</sup> day data from school year 2005-2006 in all of its cost estimates. Perhaps, more problematic, is the report by PED staff to LESC staff that data had to be collected outside of STARS in order to determine enrollment growth program units and to set the final unit value for school year 2006-2007. (In an August 2007 report to the Legislative Finance Committee, PED staff stated that the financial model, which includes the uniform public school chart of accounts data, is to be implemented into STARS in the fall of 2007).

PED staff also reported that eight of the 10 elements identified by the DQC as being essential in a longitudinal data system (see Attachment 1) had been implemented in STARS. However, according to DQC's survey of all 50 states conducted to determine which of the 10 essential elements would be in place as of school year 2006-2007, New Mexico has implemented seven of the 10 essential elements and is working on elements 6, 7, and 9.

Attachment 2, *State of the Nation in 2006-07*, summarizes the number of the "ten essential elements" reported to be in place by state. It indicates that only Florida's data system currently includes all 10 essential elements. It should be noted, however, that Florida is in the relatively unique situation of having a single agency, the Department of Education, overseeing all public education activity in the state. This obviously makes data sharing much more feasible, and the data warehouse allows the department to analyze information from all levels of education. In addition, Florida's Department of Education maintains the Florida Education and Training Placement Information Program, a data collection and reporting system established by Florida statute in 1986 that collects follow-up data on former students and participants in state educational and workforce development programs. The follow-up data is collected by linking and exchanging information with the administrative databases of participating state and federal agencies. The data comprise information pertaining to civilian and federal employment, continuing postsecondary education, incarceration, military enlistment, and public assistance participation. The system is automated and designed to link records electronically using common data elements.

### **STARS** Components and Capability

#### eScholar

According to the 2007-2008 STARS' user guide developed by PED, STARS uses the eScholar data warehouse model which stores data in a relational database that integrates summary detailed student and staff information. eScholar uses a standard set of templates for nine domains<sup>2</sup> that

<sup>&</sup>lt;sup>2</sup> The domains include: (1) assessment,-; (2) attendance; (3) course and grades; (4) discipline; (5) enrollment; (6) special education; (7) groups and programs; (8) staff; and (9) student.

provide a consistent format for loading data from various student information systems into the warehouse. The eScholar templates used in STARS and the submission schedule are summarized in Attachment 3, *Report Dates*. According to PED, data is being submitted for all of the templates except for additional templates that are being added for the "discipline" domain. Information for that domain should available in school year 2007-2008.

Other attachments included for the committee's review are:

- Attachment 4, Students To Be Reported;
- Attachment 5, Staff To Be Reported; and
- Attachment 6, *Data Submission for State Supported Educational Programs* (which includes educational services provided by the Corrections Department, facilities of the Children, Youth and Families Department (CYFD) and the Department of Health, the New Mexico School for the Blind and Visually Impaired, and the New Mexico School for the Deaf).

**Issues:** Current law requires PED to issue a state identification (ID) number for each public school student for use in the accountability data system. However, the reporting requirements for STARS do not consider New Mexico pre-kindergarten students in the public schools other than those in the three- and four-year-old programs. In addition, although a student ID is currently issued by PED for state-supported pre-kindergarten students in CYFD-approved programs, the law does not require student data to be submitted to STARS because they are technically not public school students.

Another issue concerns public school students enrolled in a state-supported facility. STARS reporting requirements (refer to Attachment 6) include data for students receiving special education services, but do not require reporting of students receiving general education services.

#### STARS Access

According to PED, many school districts and charter schools do not have the systems capability to submit template data for the nine domains. Therefore, PED developed STARS Access, an easy-to-use editor that can be used to create the STARS templates. In its *STARS Access User Manual*, PED refers to STARS Access as a "template editor" rather than an application because it is organized around the STARS templates.

**Issue:** The STARS user guide does not include or describe who has access to STARS data nor describe security measures. According to PED, currently only the designated STARS Coordinators in each district have access to STARS data and reports. Other authorized personnel vary from district to district based on approval from their respective superintendent. A login ID, which PED issues, is required for access to STARS. The *STARS Access User Manual* indicates that there is no security built into the STARS Access application. Language in the manual states, "Due to the sensitive nature of the data contained within the application, user should ensure that the STARS Access file resides on a PC or network drive that only appropriate personnel have access to. Additionally, PED recommends that STARS Access be stored frequently (to a secure location)."

STARS Coordinators have reported that security is an issue in some districts. For example, one district has received login information via email from PED.

According to PED staff, if funded in the 2008 legislative session, the Phase 3 implementation initiatives for STARS will include security administration.

# **LESC Survey of STARS**

LESC staff distributed a survey to all school district superintendents and charter school administrators on August 25, 2007. The survey requested information on district and charter school personnel that perform STARS activities, including data entry staff at the district and school levels. Other questions related to staff training and costs. The last item on the survey also allowed respondents to provide general comments about the implementation of STARS.

In total, responses from 11 public school personnel representing 10 charter schools and six districts were received by the survey deadline. The largest school district responding to the survey has an enrollment of approximately 1,800 students and the smallest has an enrollment of 280 students. Because the number of surveys returned was so small, the responses cannot be generalized to all school districts and charter schools. LESC staff will attempt to get the rest of the school district and charter school responses in order to get a more clear picture of theses issues prior to the legislative session.

Overall, the district and charters schools respondents report that:

- they do not employ a full-time STARS coordinator;
- the functions of the STARS coordinator are generally performed by a secretary. One district reported that these activities are performed by 15 staff, including the superintendent, business manager and at all school levels the principal, secretary, nurse, and bilingual teachers;
- secretaries generally enter STARS data at the district and school levels;
- school-level data is primarily being submitted directly into a school-level information system; however, four charter schools report that they submit data to the district STARS coordinator in hard copy;
- PED staff are generally courteous when contacted for assistance but not always readily accessible;
- PED staff do not consult with district or charter school before making changes to STARS;
- Training for school-level data entry personnel is mostly provided by district or charter school staff. Charter school responses indicate that little or no training is provided by either the district or PED; and
- STARS data is currently being used to primarily inform teaching, project enrollment, and to communicate with parents. One school district stated that they "are anxious to continue datadriven decision-making."

#### Other Data Warehouse Legislative Initiatives

• In 2003, the New Mexico Legislature passed and the Governor signed comprehensive education reform legislation that included a provision requiring PED to issue a state ID number for each public school student as part of the state's assessment and accountability system. In the 2004 interim, PED reported that a web-based application for the student ID

system had been completed that allows selected school personnel, district coordinators, and PED administrators to search for a student using an ID number issued by PED or any combination of first or last name and date of birth. The PED testimony also cited two reasons that a student ID system is necessary: (1) to provide accurate data for the state's Accountability Data System at PED concerning student performance and status throughout the student's educational career; and (2) to comply with accountability requirements of the federal NCLB.

In 2006, the Legislature passed House Memorial 42, which requested that the Higher Education Department (HED), representatives of institutions of higher education, PED, representatives of public schools, the CYFD, and the Office of Workforce Training and Development establish common, shared student data systems from pre-K to postsecondary levels of education, including adult basic education and training. A final report to the Legislature and Governor is due by November 1, 2007.

- In 2007, legislation was enacted that requires HED to use the PED student ID number for students enrolled in higher education and to collaborate with PED in assigning a unique student identifier for non-public school students in order to facilitate longitudinal research regarding factors that influence the success of students in the P-20 system in New Mexico.
- In 2007, reform legislation was enacted that requires PED to collaborate with public teacher preparation programs and HED to create a uniform statewide teacher education accountability reporting system to measure and track teacher education candidates from preentry to post-graduation in order to benchmark the productivity and accountability of New Mexico's teacher workforce, with annual reports from each institution and the PED to the Legislature, the Governor, other policymakers, and business and economic leaders by November 1 of each year. The first report of the work group developing a plan to implement this mandate is scheduled for October 2007.

#### Federal Support

The US Department of Education's (USDE) Institute of Education Sciences (IES) Statewide Longitudinal Data Systems Grant Program has been a core part of the investment in state capacity and political will to build data systems. In November 2005, 14 states were awarded three-year State Longitudinal Data Systems Grants in November 2005 (FY 06 grantees), and 13 additional states were awarded grants in June 2007 (FY 07 grantees) for the design and implementation of statewide longitudinal data systems in their respective states as outlined below:

		FY 07 Grantees		
\$3.5	Million	Arizona	\$6.0	million
\$3.3	Million	Colorado	\$4.2	million
\$3.3	Million	District of Columbia	\$5.7	million
\$1.5	Million	Indiana	\$5.2	million
\$1.6	Million	Kansas	\$3.8	million
\$5.8	Million	Maine	\$3.2	million
\$5.6	Million	Nebraska	\$3.5	million
\$3.0	Million	Nevada	\$6.0	million
\$3.2	Million	New Hampshire	\$3.2	million
	\$3.3 \$3.3 \$1.5 \$1.6 \$5.8 \$5.6 \$3.0	\$3.3 Million \$3.3 Million \$1.5 Million \$1.6 Million \$5.8 Million \$5.6 Million \$3.0 Million	\$3.5 Million Arizona \$3.3 Million Colorado \$3.3 Million District of Columbia \$1.5 Million Indiana \$1.6 Million Kansas \$5.8 Million Maine \$5.6 Million Nebraska \$3.0 Million Nevada	\$3.5       Million       Arizona       \$6.0         \$3.3       Million       Colorado       \$4.2         \$3.3       Million       District of Columbia       \$5.7         \$1.5       Million       Indiana       \$5.2         \$1.6       Million       Kansas       \$3.8         \$5.8       Million       Maine       \$3.2         \$5.6       Million       Nebraska       \$3.5         \$3.0       Million       Nevada       \$6.0

Total	\$52.3	Million	Total	\$62.2	million
Wisconsin	\$3.0	Million			
Tennessee	\$3.2	Million	Virginia	\$6.1	million
South Carolina	\$5.7	Million	Utah	\$4.6	million
Pennsylvania	\$4.0	Million	Oregon	\$4.7	million
Ohio	\$5.6	Million	North Carolina	\$6.0	million

Intended to help the states generate and use accurate and timely data to meet reporting requirements, support decision making, and aid education research, the grantees will be expected to submit annual and final reports on the status of the development and the implementation of these systems.

Assistance Act of 2002, Title II, the statute that created IES as the research, evaluation and statistical arm of USDE. All 50 states, five territories, and the District of Columbia were eligible to apply. The grantees were selected in a competition based on the merit of their proposals and funds available. The proposals were assessed based on aspects such as the need for the project, the quality of the project's design, and the quality of the management plan. Further, peer reviews looked at how the respective projects promoted the timely generation of accurate data for local, state, and federal reporting requirements.

**Issue:** According to PED staff, New Mexico submitted a proposal to IES two years ago but did not have the manpower or time to apply for grant assistance.

### **Considerations for Connecting Policy and Data**

To help states gain the best results from the investments they are making in the development of a data warehouse, members of the Education Information Management Advisory Consortium, an initiative of the Council of Chief State School Officers, identified the following elements that policymakers should consider as necessary in developing their state's data system:

### 1. More Than Technology Is Needed

- a. New systems require cultural and organizational change in how an agency collects, stores, and uses data in order to make full use of information.
- b. Effective project management is needed to shepherd systems development and long-term use.
- c. Professional development around use of new systems and data use is needed to realize the full potential of data systems and ensure security/privacy of data. Those who input data, have access to data, and analyze data can benefit from training.

#### 2. Strategic Planning Can Ensure Long-Term Cost Efficiencies

- a. Investing in strategic and tactical planning upfront will result in the best system at the lowest cost.
- b. New demands on systems will continue in the years ahead. It's best to build as flexible a system as possible to accommodate future changes.

#### 3. Cost Is A Complicated Issue

- a. The cost of building a system depends on a number of factors, including:
  - i. Quantity and complexity of the data, i.e., the number of data points collected.
  - ii. Characteristics of the legacy system. Is it necessary to start from scratch? Can the existing system be upgraded? How much upgrade is needed?
  - iii. Are districts contributing to the cost of the system? Or, is the state paying for necessary changes to the district systems as well as the state system? Are there economies of scale in securing statewide licenses by states on behalf of districts?
  - iv. Staff resources are needed to develop and maintain the system, along with professional development costs for training users. How much expertise currently exists in-house?
- b. A data system is never 'done.' Funds for sustainability maintenance, upgrades, etc are critical.

# 4. Student-level Data Requires Privacy, Security, and Data Governance Considerations

- a. Student-level data allows for tremendous capacity to improve student achievement. Privacy statutes (federal and state) need to balance respect for student privacy with sufficient access in order to best serve the student.
- b. The issue of ownership is key to many privacy and security issues: Who owns/controls the data? Who owns/controls the exchange of electronic student records/student transcripts? The state or the district? What is the role of regional service districts?
- c. Data warehouses may be centralized or distributed. Who controls the data warehouse? Who decides on the kinds of reports/analyses that can be created using business intelligence tools with the data warehouse?
- d. Some security features can be embedded in the technical infrastructure; other security measures must be implemented through a data use/data access policy.
- e. Data use polices should outline both appropriate and inappropriate uses of the data.

#### 5. Data Quality Is A Constant Challenge

- a. Education data originate in the school and are reported up through the district, state and federal levels. Every individual who generates, collects, and reports data has an impact on the quality of the data in the state system. They quality of the data used for decision making will affect the soundness of the decisions made. Investments in assuring data quality are critical.
- b. A statewide data dictionary can help ensure the consistent use of data definitions and greatly improve data quality. Use of the data dictionary should be required by all school and districts in the state.
- c. States need a well-defined and enforceable calendar for data collections to ensure timeliness, and collection mechanisms should be uniform for all collections.

- d. Sufficient lead time is needed to collect new data elements or implement changes in data definitions or calculations. Generally, at least one to two years are needed to implement system changes to collect a new data item.
- e. Longitudinal, cohort calculations require consistent data definitions over time and sufficient years of data.
- f. A good strategy to improve data quality is to only collect data that is useful to the data provider, i.e., schools and districts.

## **Policy Option**

Given the importance of timely, accurate, and comprehensive data, together with the sensitive nature of these data, policy options might focus on both the collection of data and the secure access to and use of data. Therefore, the committee may wish to consider requesting LESC staff to examine the feasibility of amending current law to codify the requirements for the comprehensive data warehouse to ensure that the Legislature has access to uniform, consistent, and reliable data for decision-making purposes.

# Data Quality Campaign Ten Essential Elements of Statewide Data Systems in Detail

# 1. A unique statewide student identifier that connects student data across key databases and across years.

A unique statewide student identifier is a single, non-duplicated number that is assigned to and remains with a student throughout his or her P-12 career. The assignment of this number to every student in the P-12 system provides a way to follow students as they move from grade to grade and across campuses and/or districts within the state.

A statewide student identifier can help policymakers and other decision makers know, among other things:

- The academic value-added components of a school or program;
- The achievement levels in early grades that indicate that a student is on track to success in subsequent grades; and
- The test sores in early grades which should be thresholds for intervention.

# 2. Student-level enrollment, demographic and program participation information.

Accurate information on student enrollment, demographics, and program participation (such as student participation in special education or the free and reduced price lunch program, the most common indicator of student poverty status) is essential to evaluate the effects of schools and programs, and to assess the impact of student mobility and continuous enrollment or learning.

With student-level enrollment, demographic, and program participation information, policymakers and other decision makers will be able to determine:

- The extent to which free and reduced price lunch enrollment drops off in high school and how that might affect measures of each high school's poverty rate;
- How the percentage of minority students in gifted and talented programs compares with that of other students; and
- The rate at which English language learners are entering the state for the first time in high school and how they are doing on the state's high school exit exams.

# 3. The ability to match individual students' test records from year to year to measure academic growth.

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A statewide database of individual student performance on state exams (and state-mandated local exams) should be maintained with the ability to disaggregate the result by individual item and objective, in order to provide good diagnostic information to teachers. Though most states do have annual test records for

individual student, only some of these states have created the ability to match records for individual students across time and with other databases (e.g., enrollment, course completion, and graduation databases).

With the ability to match individual student test records across years to follow student progress, policymakers and other decision makers will know (by grade and subject):

- The percent of last year's below proficient students who met the state's proficiency standard this year; and
- Whether or not proficient and advanced students are achieving at least a year's growth every year.

#### 4. Information on untested students and the reasons they were not tested.

States need to go further than tracking students who do not take the test to find out why they are not tested and then match those records to separate enrollment and program participation databases. This makes it possible to identify patterns associated with specific student populations (e.g., special education students or English language learners) and ensure that all students are held to high expectations.

With information on untested student, policymakers and other decision makers will know:

- Which students were not tested by grade and subject and why;
- Trends over time in the number and percentage of untested students from each student group (English language learners, special education students, different ethnic groups, etc.)
- Whether or not particular schools and districts have excessive absences on test day or questionable patterns of absences and exemptions across year (these measures can be used in a state's audit system to ensure data quality).

#### 5. A teacher identifier system with the ability to match teacher to students.

Many states collect data on teacher education and certification, but matching teachers to students by classroom and subject is critical to understanding the connection between teacher training and qualifications and student academic growth. Collecting this data makes it possible to identify which students and which courses are being taught by teachers with different levels and types of preparation or certification, and which forms of teacher training and certification have the greatest impact on students' academic growth in the classroom.

With a teacher identifier and the ability to connect teacher and student data, policymakers and other decision makers will know:

- The teacher preparation programs that produce graduates whose students have the strongest academic growth.
- How the experience levels of teachers in the district's high-poverty schools compare with those of teachers in other schools, and how these experience levels are related to the academic growth of the students in their classrooms.
- The relationship between the performance of the district's low-income students on the state algebra exam and teacher preparation in that subject.

# 6. Student-level transcript information, including information on courses completed and grades earned.

Many states are encouraging students, particularly low-income and minority students, to take rigorous courses in high school so that they are better prepared for success in postsecondary education and the job market. In most states however course taking data is not colleted at the state level, making it impossible to monitor the impact of these policies. To fill in the missing information, states should collect student-level transcript information from middle and high school including courses taken and grade earned.

With student-level transcript information, policymakers and other decision makers will know:

- The number and percent of students who are enrolling in and completing rigorous courses in high school disaggregated by other factors, such as ethnicity.
- The middle schools that are doing the best job of preparing students for rigorous courses in high school.
- Whether or not students in more rigorous courses in high school have been more successful in college or in the workplace.
- Whether or not there is evidence of grade inflation (e.g., students with the same test scores receive dramatically higher grades in the same course in certain schools or districts.)

## 7. Student-level college readiness test scores.

To ensure that students make a successful transition from high school to postsecondary education, it is important for states to collect and report student performance data on college admissions, placement and readiness tests. Student performance on SAT, ACT, and Advanced Placement (AP) exams are important indicators of students' college readiness; states should collect and report this data on an annual basis.

With student-level college readiness test scores, policymakers and other decision makers will know:

- How participation rates and scores on SAT, ACT, and AP exams change over time for low-income and minority students.
- The percent of student who meet the proficiency standard on the state 8<sup>th</sup> grade test who also take AP in high school and pass the corresponding AP exam.
- The percent of low-income students who met the proficiency standard on the state high school test who take the SAT and ACT exams and score at college readiness benchmark levels on those exams.

#### 8. Student-level graduation and dropout data.

The calculation of accurate graduation rates also requires the ability to accurately account for what happens to students who leave public education. For example, states must be able to distinguish correctly between departing students who drop out or get a GED from students who transfer to another school.

With good graduation and dropout data in place and the ability to match records to other databases, policymakers and other decision makers will know:

- When and why students leave the state's public education system.
- The percent of first-time ninth graders in a given year who graduate from high school within four, five, or six years.
- The schools and school systems that are doing the best job reducing the dropout rate.
- The characteristics of high school dropouts and whether or not there are early warning signs that school can look for in elementary and middle school.

# 9. The ability to match student records between the P-12 and higher education systems.

As states and school systems work to align expectations in high school with the demands of postsecondary education, they need better data on student success when they leave the P-12 system and enter college. Most states today do not have data systems that enable this two-way communication.

With the ability to match student records between P-12 and higher education systems, policymakers and other decision makers would know:

- The percentage of each district's high school graduates who enrolled in college within a specified time after graduation.
- The percentage of last year's graduates from each high school or school district who needed remediation in college.

- The percentage of students who met the proficiency standard on the state high school test and still needed remediation in the same subject in college.
- How the students' ability to stay in and complete college is related to their high school courses, grades and test scores.

### 10. A state data audit system assessing data quality, validity, and reliability.

Invalid or unreliable reporting by some schools and districts is a problem in a number of states, and this problem is likely to continue in the absence of checks on the accuracy and quality of the data submitted by schools and districts. Without a well-designed and well-implemented state data audit system, the public cannot have confidence in the quality of the information coming out of the state's public education system.

With a robust data audit system in place, policymakers and other decision makers will know:

- Whether or not the disaggregated student information used to rate school for Adequate Yearly Progress (AYP) is valid.
- The districts that do the best job or reporting valid and reliable dropout data.
- Whether or not districts are reporting their numbers of untested students and reasons for not testing the students.
- The amount and type of data quality problems identified by districts and how those problems are being addressed.



# **State of the Nation in 2006-07**

# **States by Number of Elements**

State	Elements									
	1	2	3	4	5	6	7	8	9	10
Alabama	~	-	v	X	х	х	V	•	¥	~
Alaska		-	v	v	х	х	х	~	v	v
<u>Arizona</u>	~	-	v	x	х	х	x	v	х	•
<u>Arkansas</u>	-	v	v	X	v	v	V	~	V	~
<u>California</u>	-	-	X	J	X	х	X	X	х	J
<u>Colorado</u>	-		v	v	х	х	х	•	х	v
Connecticut	~		v	v	х	х	V	v	х	v
Delaware	~	-	v	v	v	v	х	~	х	V
<u>Florida</u>	~	-	v	¥	V	v	~	~	v	~
<u>Georgia</u>	-	-	v	x	v	v	v	v	v	x
<u>Hawaii</u>	~	-	v	v	v	v	x	•	v	x
<u>Idaho</u>	x	х	Х	х	х	х	х	v	х	x
<u>Illinois</u>		•	х	v	х	х	x	X	X	x
<u>Indiana</u>	-	-	v	X	Х	Х	V	v	х	x
<u>Iowa</u>	~	-	v	x	x	X	x	•	x	~
Kansas	-	-	v	v	х	х	х	v	х	~
Kentucky	~	-	v	¥	v	х	x	X	v	~
<u>Louisiana</u>	-	-	v	v	v	v	х	v	v	v
Maine		-	х	x	х	х	х	•	x	x
Maryland	x	-	х	x	x	х	x	v	х	V
Massachusetts	-	-	v	>	X	х	x	•	J	v
Michigan	~	-	v	х	х	х	х	v	х	X
Minnesota	~	•	V	¥	х	х	х	v	х	V
<u>Mississippi</u>	-	~	V	х	V	v	х	v	V	V

	Elements									
State	1	2	3	4	5	6	7	8	9	10
<u>Montana</u>	<u> </u>	~	v	х	х	х	х	х	х	~
<u>Nebraska</u>	-	~	v	~	х	х	х	~	х	x
<u>Nevada</u>	-	~	V	V	х	V	х	V	х	~
New Hampshire	-	•	х	J	х	х	х	•	x	•
New Jersey	X	X	v	х	х	х	х	х	х	х
New Mexico	-	~	v	v	¥	х	x	v	X	~
New York	-	V	v	v	х	х	х	v	х	x
North Carolina	x	~	V	¥	X	V	x	•	х	x
North Dakota	-	~	v	v	x	х	x	v	v	~
<u>Ohio</u>	-	•	V	y	¥	х	x	•	х	•
<u>Oklahoma</u>	•	V	v	V	X	х	V	х	X	~
<u>Oregon</u>	J	-	J	X	X	X	X	J	¥	~
<u>Pennsylvania</u>	•	X	v	v	X	х	x	v	X	v
Rhode Island		V	v	v	х	х	x	х	X	x
South Carolina	~	~	v	х	V	х	х	v	х	x
South Dakota	-	~	v	X	х	х	X	¥	X	~
<u>Tennessee</u>		~	v	v	V	х	x	x	v	~
<u>Texas</u>	•	~	v	v	x	v	~	v	V	•
<u>Utah</u>	J	~	J	J	V	J	J	V	X	~
Vermont	~	V	v	J	X	х	x	v	v	•
<u>Virginia</u>	<u> </u>	V	v	v	х	х	х	v	х	v
Washington	~	~	v	~	x	v	x	v	v	~
West Virginia		V	v	v	V	х	v	v	х	V
Wisconsin	~	V	v	¥	х	х	~	~	х	V
Wyoming	-	~	v	х	V	х	x	v	v	~

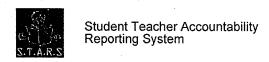
# Report Dates

Reporting dates have been established to meet various purposes. Most reporting is completed to maintain funding. Report periods will remain similar to years prior in school year 2007. The table below lists the report dates for submitting each template.

STARS Submission Schedule									
eScholar Domain	eScholar Template	40D	1-Dec	80D	120D	EOY			
Assessment	Assessment Fact	X	X	Χ	Х	Х			
	Student Daily Attendance					X			
Attendance	Student Summary Attendance	Х		х	X				
	Course	X		Χ	Х	Х			
Course and Grades	Course Instructor	X		Х	Χ	Х			
Course and Grades	Student Course Enrollment	X		X	Х				
	Student Grades					X			
Dissiplins	Student Infraction					Х			
Discipline	Student Infraction Response				X X X	Х			
Enrollment	School Enrollment					Χ			
Cuarina and	Programs Fact	X	Х	Χ	X	X			
Groups and Programs	Programs Qualification	X	X	Х	X	X			
riograms	Title I Program	X		Χ	X	Х			
	Special Education Events	X	Х	Χ	Х	Х			
Special Education	Special Education Services Fact	Х	х	X	X	X			
	Special Education Snapshot	X	X	Χ	Х	Х			
	Staff	Х	Х	Χ	Х	Х			
Ctaff	Staff Assignment	X	X	X	Х	Х			
Staff	Staff Compensation	Х		Χ	X	X			
	Staff Snapshot	Х	Х	Х	X	Χ			
	Staff Development Fact	Х			X	-			
Student	Student	Х	Х	Х	Χ	Х			
Student	Student Snapshot	Х	Χ	Х	Х	Χ			

Source: Student - Teacher Accountability Reporting System

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## Students To Be Reported in STARS

All students enrolled in a public school shall be reported in STARS. Please see the template section of this document. Students to be reported are determined as follows:

#### 3 and 4 Year olds

The following describes which 3 and 4 year olds should be reported:

- (1) Students enrolled in a federal Title IA Preschool Program funded through the Public Education Department
- (2) Students enrolled in a federal Title IB Even Start Program funded through the Public Education Department
- (3) Students enrolled in home schools or private schools that are receiving Special Education services at public expense

Students receiving services from more than one agency may be counted by only one agency. Agreements between agencies must specify which agency will count the student. (Services to students may be funded by a variety of sources, but each student should be COUNTED only once.)

Students who attend Bureau of Indian Affairs schools should not be counted by the local education agency.

#### K-12<sup>th</sup> Grade

All qualified students shall be reported. A qualified student is a public school student who:

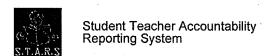
- (1) Has not graduated from high school
- (2) Is regularly enrolled in one-half or more of the minimum course requirements approved by the department for public school students
- (3) Is at least five years of age prior to 12:01 a.m. on September 1 of the school year
- (4) is at least three years of age at any time during the school year and is receiving special education services pursuant to rules of the department; or
- (5) Has not reached his or her twenty-second birthday on the first day of the school year and is receiving special education services pursuant to the regulation of the school board (NMSA 1978 22-8-2 M).

#### 3Y, and 4Y Programs

The 3Y and 4Y Programs provide Special Education services to pre-school age children. The specific programs are defined below.

- 3Y Program Students in this program are 3 years old by the last day of school and receiving Special Education (federal or state), Even Start or Title IA Services.
- 4Y Program Students in this program are 4 years old by the last day of school and receiving Special Education (federal or state), Even Start or Title IA Services.
- Note: Students that are placed in a 4Y preschool program through an IEP or if the IDEA eligible student turns 5 years of age after 12:01 a.m. on September 1<sup>st</sup> of the school year the student needs to be reported in a 4Y program, the 5Y indicator has been eliminated. If the IEP team decides that a student with a Developmental Disability would benefit from another year of preschool, the student may continue to be placed in the preschool setting through the IEP process.

Source: Student - Teacher Accountability Reporting System



## Staff To Be Reported in STARS

Staff Records are records created for all staff at a school. Staff data is used for licensure, determining class loads, and for reporting related services (ancillary) FTE for the funding formula.

Staff should be reported as follows:

#### **Certified Staff**

Certified staff meet one or more of the following:

- · Teaching or supervising an instructional program
- Counseling or providing special instructional services in a public school or state agency
- Delivering Special Education services to students aged 3-21 at public expense
- Delivering services to student's ages three and four
- · Administering in a public school
- · Serving as Business Managers
- Educational Assistants
- Coaches

#### **Non-Certified Staff**

Non-certified staff meet one or more of the following:

- Supervising/directing business offices, data processing, facilities, food service, health and transportation
- Providing administrative support in the business office, clerical, data processing and secretarial areas
- Providing support to the teaching and administrative duties of the office of the principal or department chairman
- Providing support in all other categories such as maintenance, security, cafeteria, bus drivers not on contract, etc.

#### **Related Service Providers**

Related service providers (also referred to as Instructional support providers or ancillary service providers) includes anyone who provides services for a public school or state institution as an educational assistant, school counselor, school social worker, school nurse, speech-language pathologist, psychologist, physical therapist, physical therapy assistant, occupational therapist, occupational therapy assistant, recreational therapist, interpreter for the deaf, and diagnostician.

#### Substitute Teachers - Long Term

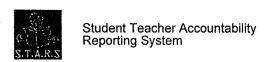
Long term substitute teachers are substitute teachers that are teaching students in a single class room for more than 4 consecutive weeks.

#### Substitute Teachers - Short Term

Short term substitutes are teaching classes for less than 4 consecutive weeks.

Source: Student - Teacher Accountability Reporting Systen

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## Data Submission for State Supported Educational Programs

State Supported Education Programs (SSEP's) must submit data on students receiving Special Education at public expense. Additionally, staff members serving publicly funded Special Education students must be submitted. The specific template requirements are listed below.

The following templates must be submitted for students:

- Student
- Student Snapshot
- Programs Qualification (if applicable)
- Programs Fact (if applicable)
- Special Education Events (if applicable)
- Special Education Services Fact (if applicable)
- Special Education Snapshot (if applicable)
- Student Daily Attendance (if applicable)
- Student Summary Attendance
- Title I Programs (if applicable)

The following templates must be submitted for staff serving publicly funded Special Education students:

- Staff
- Staff Snapshot
- Staff Assignment

Note that the following fields on the Staff and Staff Snapshot templates are not required for SSEP's:

- Gender Code
- Years Experience
- Years Experience in District
- Highest Degree Earned
- Annual Salary
- Termination Code
- Race or Ethnicity Subgroup Code.
- Highest Degree Institution Code
- Baccalaureate Degree Institution Code

The following templates do not need to be submitted by SSEP's

- Assessment Fact
- Course
- Course Instructor
- Student Course Enrolment
- Staff Compensation
- School Enrolment
- Student Infraction
- Student Infraction Response
- Student Grades

Source: Student - Teacher Accountability Reporting System

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